

# **DC Brushless Fan Motor Drivers**

# Three-Phase Full-Wave Fan Motor Driver



# **BH67172NUX**

### General description

BH67172UX is a three-phase sensorless fan motor driver used to cool off notebook PCs. It is controlled by a variable speed provided through the PWM input signal. Its feature is sensorless drive which doesn't require a hall device as a location detection sensor and motor downsizing can be achieved by limiting the number of external components as much as possible. Furthermore, introducing a direct PWM soft switched driving mechanism achieves silent operations and low vibrations.

### ● Features

- Speed controllable by PWM input signal
- Sensorless drive
- Soft switched drive Quick start
- Power save function
- Internal RNF resistance
- Quick start function

### Application

■ Small fan motor notebook PCs etc.

●Package VSON010X3030 W (Typ.) x D (Typ.) x H (Max.) 3.00mm x 3.00mm x 0.60mm



# ● Absolute maximum ratings

| Parameter                | Symbol | Limit             | Unit |
|--------------------------|--------|-------------------|------|
| Supply voltage           | VCC    | -0.3~6.5          | V    |
| Power dissipation        | Pd     | 464 <sup>*1</sup> | mW   |
| Operating temperature    | Topr   | –25 to +95        | °C   |
| Storage temperature      | Tstg   | -55 to +125       | °C   |
| Output current           | Iomax  | 700 <sup>*2</sup> | mA   |
| FG signal output voltage | VFG    | 6.5               | V    |
| FG signal output current | IFG    | 6                 | mA   |
| Junction temperature     | Tjmax  | 125               | °C   |

<sup>1</sup> Reduce by 4.64mW/°C over Ta=25°C. (On 74.2mm×74.2mm×1.6mm glass epoxy board)

## Recommended operating conditions

| Parameter                      | Symbol | Limit      | Unit |
|--------------------------------|--------|------------|------|
| Operating supply voltage range | VCC    | 1.8 to 5.5 | ٧    |

<sup>\*2</sup> This value is not to exceed Pd.